

WHAT IS CLAIMED IS

1 Claim 1. A round of gun ammunition including a projectile
2 adapted to be propelled from the gun along a trajectory to a target
3 at a subsonic velocity comprising

4 (a) an elongated generally cup-shaped case having a body
5 portion, a partially closed trailing end which houses a
6 primer, and a necked-down portion adjacent an open
7 leading end thereof,

8 (b) a quantity of gun powder disposed within and
9 incompletely filling said body portion of said case,

10 (c) an elongated projectile having distal and proximal
11 opposite ends residing in said necked down portion of
12 said case with said distal end thereof projecting
13 outside said leading end of said case and with said
14 proximal end therefor extending inwardly of said case,
15 said proximal end of said projectile including a
16 generally planar face disposed substantially
17 perpendicular to the length of said elongated projectile,
18 said proximal end of said projectile terminating inside
19 said body portion of said case with its face disposed
20 proximate said quantity of powder,

21 (d) a disc formed of readily flammable material, having
22 first and second opposite and generally parallel faces
23 and being of a circumference essentially equal to the
24 inner circumference of said body portion of said case
25 at the location of the level of said quantity of gun
26 powder, disposed within said case between said
27 quantity of powder and said face of said proximal end
28 of said projectile, said disc defining a barrier against
29 the flow of said gun powder past said disc.

1 Claim 2. The round of gun ammunition of Claim 1 and
2 including a further disc, having distal and proximal opposite faces,
3 disposed within said body portion of said case and between said
4 disc and said adjacent face of said proximal end of said projectile,
5 said further disc being of a fibrous material having a plurality of
6 tortuous passageways defined through the thickness thereof which
7 serve to filter and capture within said disc individual particles of
8 gun powder which may escape past the barrier defined by said
9 disc.

Claim 3. The round of gun ammunition of Claim 1 wherein
said disc is resiliently flexible.

Claim 4. The round of gun ammunition of Claim 1 wherein
said disc comprises paper stock.

Claim 5. The round of gun ammunition of Claim 4 wherein said disc is of a first thickness centrally thereof and of a second and lesser thickness in the circumferential margin thereof.

Claim 6. The round of gun ammunition of Claim 5 wherein said first thickness centrally of said disc is about 0.14 inch and said second and lesser thickness in the circumferential margin thereof is about 0.10 inch thick.

Claim 7. The round of gun ammunition of Claim 3 wherein said further disc comprises natural non-woven fibers.

Claim 8. The round of gun ammunition of Claim 7 wherein the weight of said disc is between about 0.10 and about 0.16 grains.

1 Claim 9. The round of gun ammunition of Claim 2 wherein
2 said distal face of said further disc is disposed contiguous said disc
3 and said proximal face of said further disc is proximate said
4 proximal face of said proximal end of said projectile disposed
5 within said body portion of said case.

Claim 10. The round of gun ammunition of Claim 1 wherein said gun powder is fast burning.

1 Claim 11. The round of gun ammunition of Claim 1 wherein
2 said projectile includes a body portion intermediate its distal and
3 proximal ends, said distal end of said projectile defines an ogive,

4 and said projectile is tapered from a first and minimum diameter
5 at its proximal end to a second and greater diameter adjacent the
6 transition of said body portion of said projectile to said ogive of
7 said projectile.

Claim 12. The round of gun ammunition of Claim 11
wherein the difference between said first and second diameters of
said tapered projectile is about 0.00030 inch.

Claim 13. The round of gun ammunition of Claim 12
wherein said round is suitable for firing from a gun of 5.56 mm
caliber.

Claim 14. The round of gun ammunition of Claim 1 and
including a separator interposed between said disc and said
proximal face of said proximal end of said projectile.

1 Claim 15. A method for the manufacture of gun ammunition
2 including a projectile adapted to be propelled from the gun along a
3 trajectory to a target at a subsonic velocity comprising the steps of

4 (a) loading a gun ammunition case having an open end
5 with a quantity of gun powder to a level less than the
6 volumetric capacity of said case,

7 (b) inserting into said open end of said case an elongated
8 projectile having distal and proximal opposite ends,
9 said distal end of said projectile projecting from said
10 open end of said case and said proximal end of said

11 projectile projecting inwardly of said case and
12 terminating proximate said gun powder disposed
13 within said case,

14 (c) disposing a disc within said case and intermediate
15 said gun powder and said proximal end of said
16 projectile, said disc having a circumference
17 approximately equal to the internal diameter of said
18 case at the location of the level of said gun powder
19 within said case and which functions as a barrier
20 against the movement of gun powders therepast.

Claim 16. The method of Claim 15 and including the step of
interposing a further disc within said case intermediate said disc
and said proximal end of said projectile, said further disc being of
a disparate material from said disc.

Claim 17. The method of Claim 16 wherein said disc is
resiliently flexible.

Claim 18. The method of Claim 16 wherein said disc
comprises wet-laid cellulosic fibers.

Claim 19. The method of Claim 18 wherein said disc
comprises paper.

1 Claim 20. The method of Claim 16 wherein said disc is of a
2 first thickness generally centrally thereof and of a second, and
3 lesser, thickness at the circumferential margin thereof, said
4 circumferential margin being of a density greater than the density
5 of said disc generally centrally thereof.

 Claim 21. The method of Claim 16 wherein said further
disc comprises air-laid natural fibers.

 Claim 22. The method of Claim 21 wherein said natural
fibers comprise cotton fibers.

1 ³
2 Claim 2~~2~~. The method of Claim 16 wherein said case
3 includes a substantially closed end adapted to receive a primer, an
4 opposite open end, and a body portion intermediate said closed
5 and open ends of said case, said case including a necked-down
6 portion intermediate said body portion and said open end
7 including the further steps of disposing a portion of said projectile
8 between its opposite ends within said necked-down portion of said
9 case, and anchoring said projectile within said stepped-down
portion against movement relative to said necked-down portion.

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 Claim 2~~3~~. The method of Claim 16 and including the step of
interposing a separator between said disc and said proximal face of
said proximal end of said projectile within said case.